

FIRMWARE RELEASE NOTES



Model	Chameleon CTM-15X modem
Revision	Firmware R1.3.0 Revision 1.0

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1 Revision Control

Description	Revision	Date
Customer Release	Firmware R1.3.0 Rev 1.0	01-Feb-2010

2 Firmware Release Notes for the CTM-15X Modem (R1.3.0)

This release note provides an overview of the features in the CTM-15x embedded firmware release. CTM-15X R1.3.0 integrates CTM-15X functionality with a new embedded Linux distribution, OpenWrt, which provides improved hardware support and improved flexibility and control.

2.1 Upgrading

Note: New modems produced since the 1.3.0 firmware release are being loaded with firmware version R1.3.0. For upgrading existing modems with factory serial numbers(S/N) beginning in CTM152C..., CTM152E... and later, please contact Cypress Solutions for details.

2.2 Features Supported

Feature	R1.3.0	R1.2.1
A-GPS support	USB598 only	No
Chlorobyte Salt-Spreader Support	Yes	Yes
Embedded E-VDT support	Yes	Yes
Embedded Gateway support	Yes	Yes
Embedded Vehicle Control and Track support	Yes	No
Embedded Web Pages for all CTM-15X features	Yes	No
Embedded Wireless Serial Gateway support	Yes	No
Enhanced remote configuration via ULCP	Yes	No
Enhanced router features: DMZ, friends list	Yes	No
External GPS support	Yes	No
Half-bridge mode	No	Yes
Incremental updates support	Yes	No
MODBUS	Yes	Yes
Packet Assembly/Disassembly (PAD)	Yes	Yes
RF switch support	USB, PC card devices	PC card devices only
Remote access features	SSH, Telnet, Web	Telnet, Web
Standard Dial-up Support	No	Yes
Swipe card interface support	Serial HID, HID over GPIO, Serial iButton	Serial HID
Wi-fi support	Yes	No

2.3 New Features

New embedded web page support for full modem configuration and monitoring - Use new embedded web pages for configuration and monitoring of all CTM-15X features.

Support for incremental updates - Get the latest updates and features for your modem without having to upgrade the entire modem firmware. Reduce over-the-air data cost through smaller, incremental updates.

Support for a broader range of wireless data devices

- HSPA: Sierra Wireless MC8700, Sierra Wireless 306
- EVDO: Huawei EC168, Novatel U760, UTStarcom UM175
- Wi-fi: Ubiquiti SRC, Proxim Orinoco 11b/g

Embedded support for new Cypress Solutions products - Leverage the full feature set of the Vehicle Control and Track System and the Wireless Serial Gateway integrated with proven CTM-15X functionality.

Wi-Fi support - Leverage the benefits of a Chameleon CTM-15X modem within an existing Wi-fi infrastructure.

- supports WPA/PSK/EAP-TLS/TKIP authentication/encryption
- supports Ubiquity SRC , Proxim Orinoco 11b/g wifi cards

External GPS support - Increase the accuracy of GPS data reported by your CTM-15X modem by connecting a third-party external GPS device via USB or RS232. Added support for incorporating external GPS into the CTM-15X reporting system and GPS LED indicator.

A-GPS support - Obtain GPS data in locations where conventional GPS is not available via A-GPS (Sierra Wireless USB598 support only). Added support for incorporating A-GPS data into the CTM-15X reporting system and GPS LED indicator.

Automated Remote Configuration of Modems - Avoid manual configuration of modems in your fleet. Simply write a single configuration script and have your custom server/application trigger each modem to update its configuration via ULCP messages.

On-demand modem reporting - Reduce your modems' over-the-air data cost by generating reports only when needed. Trigger modem reports, on-demand, using a custom server/application and ULCP messages.

Enhanced router features for better access control - Control access to your modem and its LAN devices using the friends list and demilitarized zone (DMZ) features.

SSH support - Perform remote command line configuration of your modems more securely than Telnet over the Internet.

RF switch feature for USB wireless devices - Turn off the RF portion of your modems with USB wireless devices in areas sensitive to RF interference (blasting zones, etc.) via the RF switch accessory device.

Enhanced support for card swipe interfaces - With HID over GPIO use both the HID card swipe interface via GPIO while freeing up your modem's serial port for CTM-15X serial port features (PAD, MODBUS, Gateway, etc.). Added support for the iButton interface over serial port.

2.4 Fixes

- [confupgrade](#) can now execute configuration scripts containing Windows line endings (<CR><LF>)
- Modem ID field of the \$PGPS message is no longer incorrectly padded with trailing zeros
- In ULCP message 112, corrections were made to the digital input state byte bits 5 and 6 to match documentation
- **cmd user** and **cmd pswd** now correctly change username and password in PPP scripts, which are used for simple IP authentication

- Corrected an issue in generating firewall configuration When running in MODBUS or PAD mode
- Power management commands now work when RF switch support is enabled
- Improved operation and structure of nonvolatile modem state data, specifically RF switch state and GPS odometer

2.5 Documentation

The modem command reference for the Chameleon CTM-15X modems can be found on our website at http://www.cypress.bc.ca/command_reference_modem_R130.html

The following commands have been updated in R1.3.0:

- confupgrade
- landhcp
- mode
- ppp
- showconfig
- showstate
- swipereport
- telnetport
- telnetpswd

The following commands have been added in R1.3.0:

- agpspde
- apply
- dmz
- friends
- gpsdata
- gpsinput
- gpsparam
- rmtssh
- sstimeout
- swipemode
- upgradefw
- wifiwd

The following commands have been removed in R1.3.0:

- landns
- webpswd

3 Technical Support/Warranty:

Cypress Solutions Service**Support Group**

1.877.985.2878 or 604.294.4465

9.00am to 5.00pm PST

@cypress.bc.ca